

# MMS

Media Management System

# Main functionalities

- Ingest of Media Contents
- Digital Asset Management
- Editing/processing functionalities
- Workflow management
- Transcoding engine
- Multiple interfaces
- Recording application

# Ingest of Media Contents

- Live Stream Cloud Ingest (UDP, RTP, SRT, HTTP HLS, ecc)
- Direct HD SDI Ingest
- H264, H265, ...
- Format agnostic
- Multi resolution ingest
- Live-VOD scalability: unlimited
- Editing/Export/Publishing of Media Contents

### Upload Media Content

Load Media Content by

Choose or drag and drop the media content

✓ Uploading the file

+ Choose

Title

File name

Tags

Unique name

Retention

title

tags

unique name

retention

3d

Reset

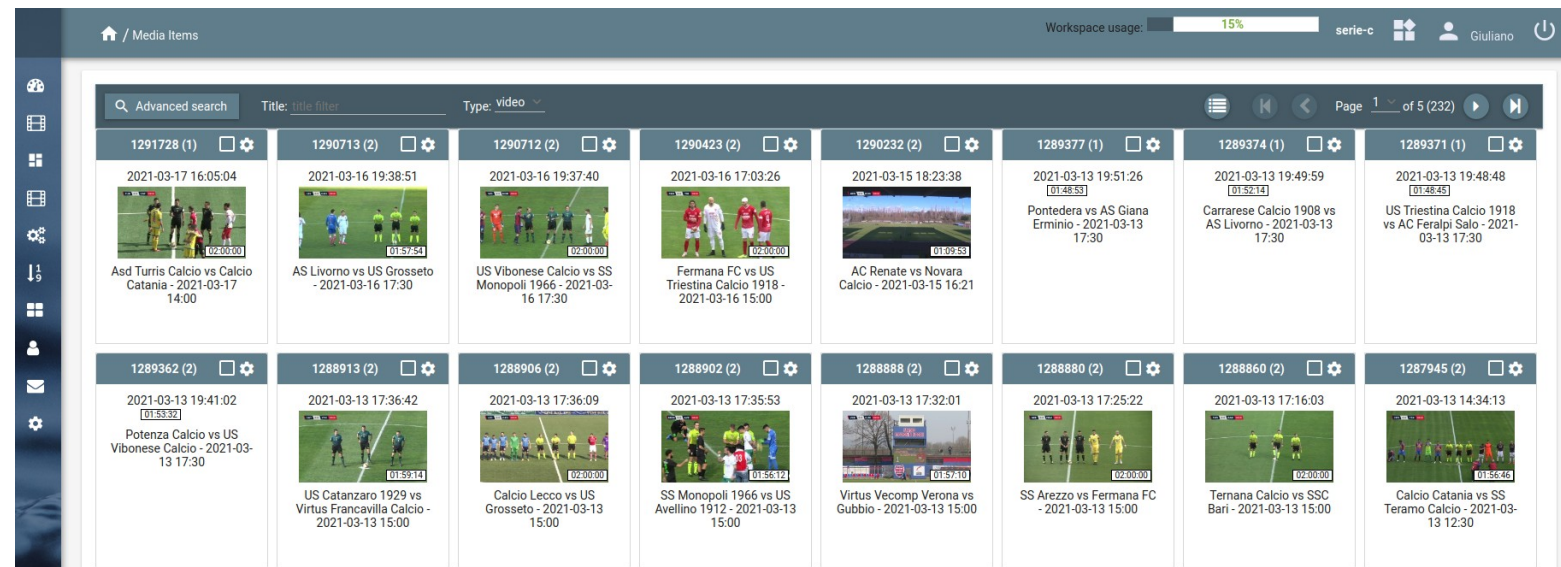
Ingest Media Content into MMS

MMS

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# Digital Asset Management

- Management of Video, Audio, Images
- Search of media contents by Title, Tag, Description, ...
- User Data can be associated to any Media Content
- Media contents are organized in Workspaces (Media Storages)
- A Workspace can be shared with other Users

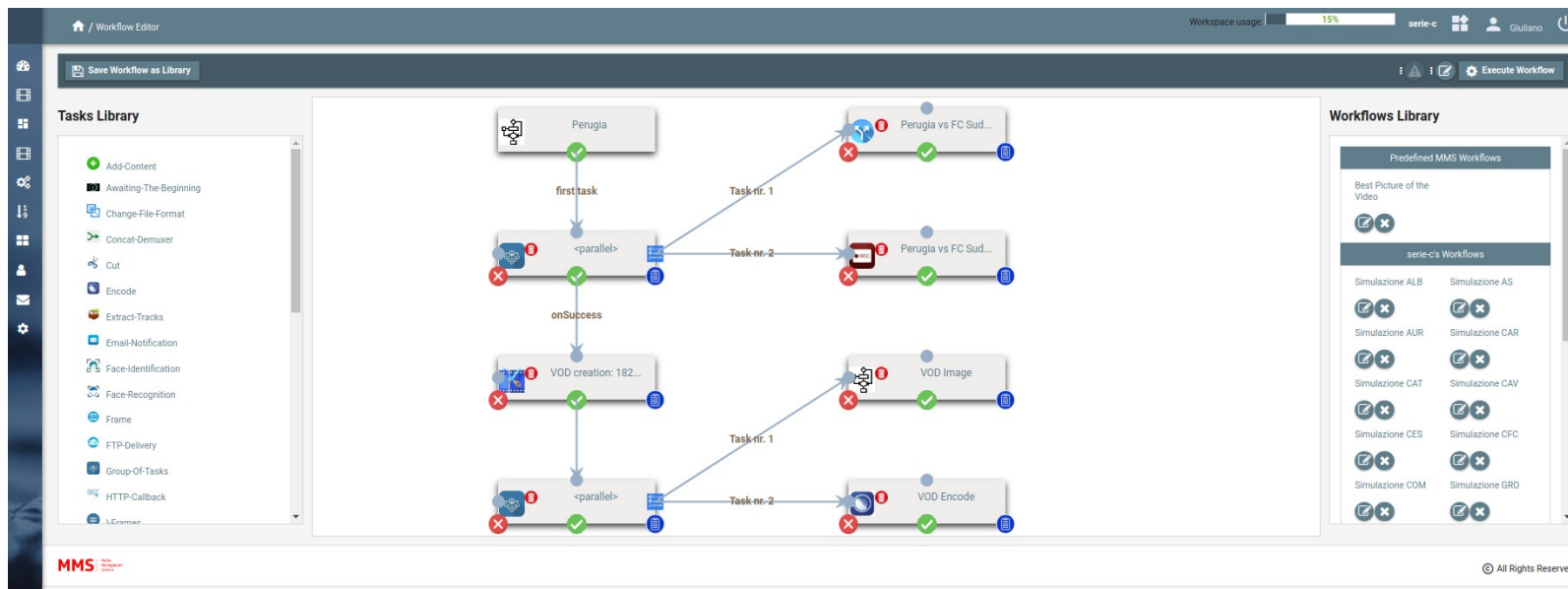


# Editing/processing functionalities

- Video-Audio Cut and Concat (Frame Accurate)
- Image crop
- Face detection (ex: thumbnails generation) and learning
- Face recognition
- Audio extraction/Processing
- Video-Audio Slow Down
- Video Slide show
- Picture in Picture
- Overlay of image-text
- Live Mosaic
- Live Proxy
- Change file format
- Frame extraction/Processing
- Count-down video creation
- Motion JPEG
- Media Cross References
- POST on Facebook
- POST on YouTube
- FTP delivery
- HTTP callback
- Email-notification

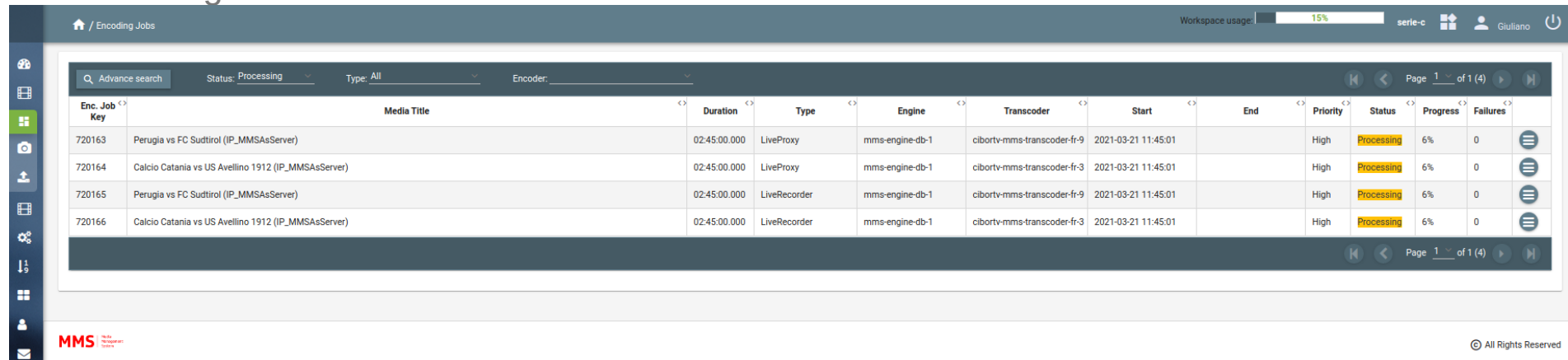
# Workflow management

- Workflow defined by the user
- Library of predefined Task
- Task Library can be extendable
- Parallel execution of multiple Workflows
- Management of synchronous and asynchronous Tasks
- Definition of Workflows by API
- Definition of Workflows by Web Interface



# Transcoding engine

- ffmpeg used by default
- Possible integration with third party transcoders
- H264/H265/... Input/Output
- MXF OP1a Input (necessaria licenza per Output)
- Management of array of transcoders
- Management of encodings by priorities
- Load balancing of Transcoders



Workspace usage: 15%

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Giuliano

Advance search

Status: Processing

Type: All

Encoder:

Enc. Job Key	Media Title	Duration	Type	Engine	Transcoder	Start	End	Priority	Status	Progress	Failures
720163	Perugia vs FC Sudtirol (IP_MMSAsServer)	02:45:00.000	LiveProxy	mms-engine-db-1	cibortv-mms-transcoder-fr-9	2021-03-21 11:45:01		High	Processing	6%	0
720164	Calcio Catania vs US Avellino 1912 (IP_MMSAsServer)	02:45:00.000	LiveProxy	mms-engine-db-1	cibortv-mms-transcoder-fr-3	2021-03-21 11:45:01		High	Processing	6%	0
720165	Perugia vs FC Sudtirol (IP_MMSAsServer)	02:45:00.000	LiveRecorder	mms-engine-db-1	cibortv-mms-transcoder-fr-9	2021-03-21 11:45:01		High	Processing	6%	0
720166	Calcio Catania vs US Avellino 1912 (IP_MMSAsServer)	02:45:00.000	LiveRecorder	mms-engine-db-1	cibortv-mms-transcoder-fr-3	2021-03-21 11:45:01		High	Processing	6%	0

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# Multiple interfaces

- REST API: integration of all MMS functionalities
- Java MMS REST API Library
- Java MMS Workflow Library
- Secure Content delivery (token by path or parameter, TTL, max retries)
- Users' rights management (integration with Active Directory available)
- WEB interface



# Recording application

- Easy way to record IP live feed (UDP, RTP, SRT, HTTP HLS, ecc)
- Preview of each recording
- VOD available during the recording up to 10 seconds from real time
- Scheduling of recording

The screenshot displays the MMS Recorder application interface. At the top, a navigation bar shows 'Recorder' and 'Workspace usage: 15%'. The main area is divided into two sections. The left section features a live video preview of a football match between Perugia and FC Südtirol, with the score 'PER 0-0 SUD 00:00' and the stadium name 'PERUGIA' visible. The right section contains a metadata table for the recording.

Title	Channel	Start	End	Copy URL	Created by
Perugia vs FC Südtirol	182521	2021-03-21 11:45:00	2021-03-21 14:30:00	<a href="#">Copy URL</a>	Giuliano

Below the main preview, there is a 'Planned Recording List' section. It includes a table with columns for Key, Ingestor, Title, Channel, Start, End, and Virtual VOD. The table shows two scheduled recordings for March 21st.

Key	Ingestor	Title	Channel	Start	End	Virtual VOD
182521	Perugia vs FC Südtirol	Perugia vs FC Südtirol		11:45	14:30	
215055	Calcio Catania vs US Avellino 1912	Calcio Catania vs US Avellino 1912				

The interface also includes a sidebar with various icons and a footer with the MMS logo and '© All Rights Reserved'.